## KOREAN PATENT ABSTRACTS

(11)Publication number:

1020020038540 A

(43) Date of publication of application: 23.05.2002

(21)Application number:

1020010071313

(22)Date of filing:

16.11.2001

(71)Applicant:

CHA, GUK HEON

LEE, HUI U LEE, JIN KYU

(72)Inventor:

YOON, DO YOUNG CHA, GUK HEON

EE, HUI U EE, JIN KYU YOON, DO YOUNG

(51)Int. CI

C08G 77 /04

## (54) POLYMETHYLSILSESQUIOXANE COPOLYMER AND PREPARATION THEREOF AND LOW DIELECTRIC COATING MEMBRANE USING THE SAME

## (57) Abstract:

PURPOSE: Provided are a soluble polymethylsilsesquioxane copolymer having many terminals and a large molecular weight, a preparation thereof, and a low dielectric coating membrane using polymethylsilsesquioxane copolymer. CONSTITUTION: The polymethylsilsesquioxane is produced by copolymerizing methyltrialkoxy silane represented by the formula 1 with one or two monomers selected from alpha, omega-bis(trialkoxysilyI) compound represented by the formula 2 or bis(methyldimethoxysilyl)ethane in a mixture solvent of an organic solvent and water in the presence of an acid catalyst. The polymethylsilsesquioxane contains the Si-OH terminal content of more than 10%, a molecular weight of 5,000-30,000, and a crosslinkable

organic silicon monomer. And the low dielectric coating membrane is formed by mixing the polymethylsilsesquioxane copolymer with a pore generating agent in an organic solvent and then coating the mixture on a substrate. In the formula, R is CH3- or CH3CH2- and -X-Y- is -CH2-CH2-.

copyright KIPO 2002

## Legal Status

Date of request for an examination (20011116)

Notification date of refusal decision (00000000)

Final disposal of an application (registration)

Date of final disposal of an application (20050204)

Patent registration number (1004866220000)

Date of registration (20050421)

Number of opposition against the grant of a patent ()

Date of opposition against the grant of a patent (00000000)

Number of trial against decision to refuse ()

Date of requesting trial against decision to refuse ()